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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,702	12/31/2003	Ravikumar Mohandas	1000-0031	9212
7590 The Law Offices of John C. Scott, LLC c/o PortfolioIP P.O. Box 52050 Minneapolis, MN 55402			EXAMINER NOORISTANY, SULAIMAN	
			ART UNIT 2146	PAPER NUMBER
			MAIL DATE 01/22/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/749,702	RAVIKUMAR MOHANDAS
	Examiner Sulaiman Nooristany	Art Unit 2146

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-3 and 5-33 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-3 and 5-33 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date. _____.                                     |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>07/08/2005</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application |
|   | 6) <input type="checkbox"/> Other: _____.                         |

***Detailed Action***

This Office Action is response to the application (10749702) filed on 31 December 2003.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a), which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

**Claims 1-3, 5-6, 8-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gu. U.S. App No. US 2004/0260800 in view of Oakano. U.S. App. No. US 2002/0062485.**

**Regarding claim 1, Gu, teaches wherein a client device comprising:**

**an ad-hoc client to manage connection of said client device to an ad-hoc wireless network (ad-hoc self-set by devices to interoperate with other devices on a network – Abstract, lines 3-4, Fig. 25, unit 852 -- WAN);**

**a DHCP client to send a DHCP discover message in response to a command from said ad-hoc client (Fig. 29, unit 900 -- computing device, unit 950 --Client device send a (DHCP BROADCAST) discover message); and**

a tinyDHCP unit (**router, modem, client terminal**) to sense said DHCP discover message (**Fig. 29, unit 900 -- computing device, unit 950 -- client device receive (DHCP BROADCAST) discover message**)

With respect to claim 1, Gu teaches well the invention set forth above except for the claimed “*allocate an IP address for the client device in response thereto*”.

Okano teaches that it is well known to *allocate an IP address for the client device in response thereto (a DHCP to dynamically allocate an IP address to a subscriber terminal – Abstract, lines 1-2, a dynamic IP address allocation is automatically performed by the DHCP – Page. 1, [0006]).*

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Gu’s invention by utilizing the DHCP system for allocating an IP address to the client device in response to receiving a DHCP discover message where as dynamic allocation is the only method which provides dynamic re-use of IP addresses. A network administrator assigns a range of IP addresses to DHCP, and each client computer on the LAN has its TCP/IP software configured to request an IP address from the DHCP server when that client computer’s network interface card starts up. The request-and-grant process uses a lease concept with a controllable time period (as taught by Okano).

**Regarding claim 2,** Gu and Okano together taught the client device of claim 1, as described above. Gu further teaches wherein, a packet driver to provide raw access to a wireless network medium for at least the tinyDHCP unit without using sockets

**functionality (FIG. 25, unit 852 include a wide area network (WAN), FIG. 30, a client that accesses and uses the embedded computing device 900 over the computer network has an exemplary client software architecture 950, which includes software code modules for applications 952, simple discovery 954, XML 955, LDAP 956, TCP/IP stack 958 (WinSock) and a network interface card (NIC) 960 that provides a physical connection to the computer network – Page. 30, [0559]).**

**Regarding claim 3, Gu and Okano together taught the client device of claim 2, as described above. Gu further teaches wherein, said packet driver is a part of a packet capture library (**a set-up and configuration process through which appropriate driver software is installed by a user or administrator onto the host for use in controlling the peripheral – Page. 1, [0006]**).**

**Regarding claim 5, Gu and Okano together taught the client device of claim 1, as described above. Gu further teaches wherein, said DHCP client sends said DHCP discover message to a predetermined port that is monitored by said tinyDHCP unit (TCP/IP provides the ability to initiate a connection with a specified application running on a specific device provided both the network address of the device (IP address) and the application address (port) are known – Page. 7, [0122], a TCP socket using its IP address and an arbitrary port number. This address/port pair will be referenced by all incoming URL requests – Page. 23, [0398]).**

**Regarding claim 6**, Gu and Okano together taught the client device of claim 1, as described above, Okano further teach tinyDHCP unit tests the availability of said IP address (**the DHCP reply packets in response to the DHCP discover and in which IP addresses pooled by the DHCP servers – Page. 5, [0092]**).

**Regarding claim 8**, Gu and Okano together taught the client device of claim 1, as described above. Okano further teaches wherein, said tinyDHCP unit sends a DHCP offer (**Fig. 2, DHCP OFFER -- M6, M8**) that includes the IP address (**Fig. 1, - M12 (REGISTERATION OF IP1 (IP ADDRESS) in FILTERING TABLE BY DHCP)**)

**Regarding claim 9**, Gu and Okano together taught the client device of claim 8, as described above. Okano further teaches wherein, said tinyDHCP unit sends said DHCP offer to a predetermined port that is monitored by said DHCP client (**listener will listen on a TCP port for notifications sent – Page. 17, [0282], DHCP or client device listens for incoming connection requests on that socket and sets itself up to accept any incoming connections – Page. 23, [0399]**).

**Regarding claim 10**, Gu and Okano together taught the client device of claim 8, as described above. Okano further teaches wherein, said DHCP client senses said DHCP offer and sends a DHCP request based thereon [**see above rejection**], wherein said DHCP request includes said IP address (**Fig. 2, DHCP REQUEST (M9) from subscriber terminal**).

**Regarding claim 11**, Gu and Okano together taught the client device of claim 10, as described above. Okano further teaches wherein, said DHCP client verifies availability of said IP address before sending said DHCP request (**the DHCP reply packets in response to the DHCP discovers and in which IP addresses pooled by the DHCP servers – Page. 5, [0092]**).

**Regarding claim 12**, Gu and Okano together taught the client device of claim 10, as described above. Gu further teaches wherein, said tinyDHCP unit senses said DHCP request and sends a DHCP acknowledge (ACK) message in response thereto (**Fig. 2, (DHCP “ACK” -- M11 & M12)**). Okano further teaches wherein a DHCP acknowledge (ACK) message from within the client device (**Fig. 24, user control point send “200 OK”**).

**Regarding claim 13**, Gu and Okano together taught the client device of claim 1, as described above. Gu, further teaches wherein, said tinyDHCP unit (**modem, router, client computer, server**) is associated with a user interface to allow a user to specify DHCP parameters (**UPnP uses SSDP to allow User Control Points to find Controlled devices and Services. SSDP operates in a default, completely automatic multicast UDP/IP based mode in addition to a server-based mode that uses TCP/IP for registrations and query – Page. 6, [0093]**).

**Regarding claim 14, Gu teaches wherein a method for use in connecting a client device to an ad-hoc network (ad-hoc self-set by devices to interoperate with other devices on a network – Abstract, lines 3-4, Fig. 25, unit 852 (LAN or WAN)), comprising:**

**sending a DHCP discover message from within the client device (Fig. 29, unit 900 (computing device), unit 950 (Client device) send a (DHCP BROADCAST) discover listener (message));**

**receiving said DHCP discover message within the client device (Fig. 29, unit 900 (computing device), unit 950 (client device) receive (DHCP BROADCAST) discover response (message)); and**

With respect to claim 14, Gu teaches well the invention set forth above except for the claimed “*allocating an IP address to the client device in response to receiving said DHCP discover message, within the client device*”.

Okano teaches that it is well known to *allocating an IP address to the client device in response to receiving said DHCP discover message, within the client device* (**a DHCP to dynamically allocate an IP address to a subscriber terminal – Abstract, lines 1-2, a dynamic IP address allocation is automatically performed by the DHCP – Page. 1, [0006]**).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Gu’s invention by utilizing the DHCP system for allocating an IP address to the client device in response to receiving a DHCP discover message where as dynamic allocation is the only method which provides dynamic re-use of IP

addresses. A network administrator assigns a range of IP addresses to DHCP, and each client computer on the LAN has its TCP/IP software configured to request an IP address from the DHCP server when that client computer's network interface card starts up. The request-and-grant process uses a lease concept with a controllable time period (as taught by Okano).

**Regarding claim 15**, Gu and Okano together taught the method of claim 14, as described above. Gu further teaches wherein, sending includes sending said DHCP discover message to a predetermined port (**TCP/IP provides the ability to initiate a connection with a specified application running on a specific device provided both the network address of the device (IP address) and the application address (port) are known – Page. 7, [0122]**), a TCP socket using its IP address and an arbitrary port number. This address/port pair will be referenced by all incoming URL requests – Page. 23, [0398]).

**Regarding claim 16**, Gu and Okano together taught the method of claim 15, as described above. Okano further teaches wherein, receiving includes monitoring said predetermined port and sensing said DHCP discover message on said predetermined port (**listener will listen on a TCP port for notifications sent – Page. 17, [0282]**, **DHCP or client device listens for incoming connection requests on that socket and sets itself up to accept any incoming connections – Page. 23, [0399]**).

**Regarding claim 17**, Gu and Okano together taught the method of claim 14, as described above. Okano further teaches wherein, sending a DHCP offer (**Fig. 2, DHCP OFFER (M6), (M8)**) that includes said IP address (**Fig. 1, (M12) REGISTRATION OF IP1 (IP ADDRESS) in FILTERING TABLE BY DHCP**), after allocating said IP address, from within the client device (**Fig. 1, COMPLETION OF IP ADDRESS ALLOCATING BY DHCP**).

**Regarding claim 18**, Gu and Okano together taught the method of claim 17, as described above. Okano further teaches wherein testing the availability of said IP address before sending said DHCP offer (**the DHCP reply packets in response to the DHCP discovers and in which IP addresses pooled by the DHCP servers – Page. 5, [0092]**).

**Regarding claim 19**, Gu and Okano together taught the method of claim 17, as described above. Gu further teaches wherein, sending a DHCP offer [**see above rejection**] includes causing a packet driver to send said DHCP offer on a wireless network medium (**Fig. 25, unit 852 (LAN/WAN), a set-up and configuration process through which appropriate driver software is installed by a user or administrator onto the host for use in controlling the peripheral – Page. 1, [0005]**).

**Regarding claim 20**, Gu and Okano together taught the method of claim 19, as described above. Gu further teaches wherein, said packet driver sends said DHCP offer

on said wireless network medium without the use of sockets functionality (**FIG. 25, unit 852 include a wide area network (WAN), FIG. 30, a client that accesses and uses the embedded computing device 900 over the computer network has an exemplary client software architecture 950, which includes software code modules for applications 952, simple discovery 954, XML 955, LDAP 956, TCP/IP stack 958 (WinSock) and a network interface card (NIC) 960 that provides a physical connection to the computer network – Page. 30, [0559]).**

**Regarding claim 21,** Gu and Okano together taught the method of claim 17, as described above. Okano further teaches wherein receiving said DHCP offer within the client device (**Fig. 2, DHCP offer (M6 & M8) in subscriber terminal**); and sending, after receiving said DHCP offer, a DHCP request that includes said IP address from within the client device (**Fig. 2, DHCP REQUEST (M9) from subscriber terminal**).

**Regarding claim 22,** Gu and Okano together taught the method of claim 21, as described above. Okano further teaches wherein, verifying that the IP address within the DHCP offer is available before sending said DHCP request (**the DHCP reply packets in response to the DHCP discovers and in which IP addresses pooled by the DHCP servers – Page. 5, [0092]**).

**Regarding claim 23,** Gu and Okano together taught the method of claim 21, as described above. Okano further teaches wherein, receiving said DHCP request within

the client device; and sending, after receiving said DHCP request [**see above rejection**], a DHCP acknowledge (ACK) message from within the client device (**Fig. 24, user control point send “200 OK”**). Gu further teaches wherein a DHCP acknowledge (ACK) message from within the client device (**Fig. 2, (DHCP “ACK” -- M11 & M12)**)

**Regarding claim 24**, Gu and Okano together taught the method of claim 23, as described above. Okano further teaches wherein, receiving said DHCP ACK message within the client device (**Fig. 2, (DHCP “ACK” -- M11 & M12)**).

**Regarding claim 25**, Gu and Okano together taught the method of claim 14, as described above. Okano further teaches wherein, allocating includes using dynamic DHCP allocation (**DHCP to dynamically allocate an IP address – Abstract, lines 1-2**).

**Regarding claim 26**, Gu teaches wherein an article comprising computer readable storage media having instructions stored thereon that, when executed by a computing platform (**server, client terminal**), result in:  
sending a DHCP discover message from within a client device (**Fig. 29, unit 900 (computing device), unit 950 (Client device) send a (DHCP BROADCAST) discover listener (message)**);

receiving said DHCP discover message within the client device (**Fig. 29, unit 900 -- computing device, unit 950 -- client device receive (DHCP BROADCAST) discover response (message)**)

With respect to claim 26, Gu teaches well the invention set forth above except for the claimed “*allocating an IP address to the client device in response to receiving said DHCP discover message, within the client device*”.

Okano teaches that it is well known to *allocating an IP address to the client device in response to receiving said DHCP discover message, within the client device* (a DHCP to dynamically allocate an IP address to a subscriber terminal – **Abstract, lines 1-2, a dynamic IP address allocation is automatically performed by the DHCP – Page. 1, [0006]**).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Gu’s invention by utilizing the DHCP system for allocating an IP address to the client device in response to receiving a DHCP discover message where as dynamic allocation is the only method which provides dynamic re-use of IP addresses. A network administrator assigns a range of IP addresses to DHCP, and each client computer on the LAN has its TCP/IP software configured to request an IP address from the DHCP server when that client computer’s network interface card starts up. The request-and-grant process uses a lease concept with a controllable time period (as taught by Okano).

**Regarding claim 27, Gu and Okano together taught the article of claim 26, as described above. Gu, further teaches wherein, sending includes sending said DHCP discover message to a predetermined port (TCP/IP provides the ability to initiate a connection with a specified application running on a specific device provided both the network address of the device (IP address) and the application address (port) are known – Page. 7, [0122], a TCP socket using its IP address and an arbitrary port number. This address/port pair will be referenced by all incoming URL requests – Page. 23, [0398]).**

**Regarding claim 28, Gu and Okano together taught the article of claim 27, as described above. Gu, further teaches wherein, receiving includes monitoring said predetermined port and sensing said DHCP discover message on said predetermined port (listener will listen on a TCP port for notifications sent – Page. 17, [0282], DHCP or client device listens for incoming connection requests on that socket and sets itself up to accept any incoming connections – Page. 23, [0399]).**

**Regarding claim 29, Gu and Okano together taught the article of claim 26, as described above. Gu, further teaches wherein, sending a DHCP offer (Fig. 2, DHCP OFFER -- M6, M8) that includes said IP address (Fig. 1, (M12) REGISTRATION OF IP1 (IP ADDRESS) in FILTERING TABLE BY DHCP), after allocating said IP address, from within the client device (Fig. 1, COMPLETION OF IP ADDRESS ALLOCATING BY DHCP).**

**Regarding claim 30, Gu teaches wherein, a client device comprising:**

**a wireless network interface card (NIC) (Fig. 30, unit 960 (NIC), a network interface card (NIC) -- Page. 30, [0559]) to provide an interface to a wireless**

**network medium (radio frequency (including satellite, cell, pager, commercial signal sideband, etc. – Page. 28, [0530]);**

**an ad-hoc client to manage connection of said client device to an ad-hoc wireless network (ad-hoc self-set by devices to interoperate with other devices on a network – Abstract, lines 3-4);**

**a DHCP client to send a DHCP discover message in response to a command from said ad-hoc client (Fig. 29, unit 900 (computing device), unit 950 (Client device) send a (DHCP BROADCAST) discover listener (message)); and**

**a tinyDHCP unit (modem, router, client computer, server) to sense (listen) said DHCP discover message (Fig. 29, unit 900 (computing device), unit 950 (client device) receive (DHCP BROADCAST) discover response (message)).**

With respect to claim 30, Gu teaches well the invention set forth above except for the claimed “*allocate an IP address for the client device in response thereto*”.

Okano teaches that it is well known to utilize a DHCP client to send a DHCP discover message in response to a command from said ad-hoc client (**Fig. 2, sending DHCP discover -- M1-M3**), allocate an IP address for the client device in response thereto (**a DHCP to dynamically allocate an IP address to a subscriber terminal – Abstract, lines 1-2, a dynamic IP address allocation is automatically performed by the DHCP – Page. 1, [0006]**).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Gu's invention by utilizing the DHCP system for allocating an IP address to the client device in response to receiving a DHCP discover message where as dynamic allocation is the only method which provides dynamic re-use of IP addresses. A network administrator assigns a range of IP addresses to DHCP, and each client computer on the LAN has its TCP/IP software configured to request an IP address from the DHCP server when that client computer's network interface card starts up. The request-and-grant process uses a lease concept with a controllable time period (as taught by Okano).

**Regarding claim 31,** Gu and Okano together taught the client device of claim 30, as described above, Gu further teaches wherein, said wireless NIC is configured (**NIC**) in accordance with the IEEE 802.11 (**router**) wireless networking standard (**Fig. 25, unit 820 personal computer communicates via unit 854 router/modem over the unit 852 (WAN)**).

**Regarding claim 32,** Gu and Okano together taught the client device of claim 30, as described above, Gu further teaches wherein, a packet driver to provide raw access to said wireless network medium for the tinyDHCP unit without using sockets functionality (**FIG. 25, unit 852 include a wide area network (WAN), FIG. 30, a client that accesses and uses the embedded computing device 900 over the computer network has an exemplary client software architecture 950, which includes**

**software code modules for applications 952, simple discovery 954, XML 955, LDAP 956, TCP/IP stack 958 (WinSock) and a network interface card (NIC) 960 that provides a physical connection to the computer network – Page. 30, [0559]).**

**Claim 33** has the similar limitation as of claim 3; therefore, it's rejected under the same rationale as in claim 3.

**Claims 7** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Gu**. U.S. App No. **US 2004/0260800** in view of **Oakano**. U.S. App. No. **US 2002/0062485**, further in view of **Gardiner** U.S. Ap. No. **US 2003/0225864**.

**Regarding claim 7**, Gu and Okano together taught the method of claim 6, as described above. However, Gu and Okano do not explicitly teach *said tinyDHCP unit tests the availability of said IP address by sending an ICMP echo request*.

Gardiner teaches wherein, testing the availability of said IP address before sending said DHCP offer. (**A host could find an unused IP address on the subnet using the Internet Control Message Protocol (ICMP) ping command – Page. 1, [0009]**).

It would have been obvious to one ordinary skilled in the art at the time the invention was made to combine the teachings of Gardiner for testing the availability of IP address before sending DHCP offer. Motivation would be to complement the step of the known art that Gu and Okano attempt to resolve such enabling a host or client to

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obtain and reserve exclusive unique IP address with Gardner means that support obtaining a unique and reserved IP address.

***Response to Arguments***

Applicant's arguments filed on 12/17/2007 have been fully considered but they are not persuasive. According to the applicant arguments "a tinyDHCP unit to ~~same~~ sense said DHCP discover message and allocate an IP address for the client device in response thereto." In response to the above argument, Gu does discloses a tinyDHCP which is the AutoIP operative module within the client device also used for automatic network introduction via AutoIP in the UPnP protocol. AutoIP uses a predefined set of IP addresses and, when a device is connected to the network, it pings (sense/listen) an address in this address space. If it gets no replies, the device assumes that the address is available and assigns it to itself. To make this functionality even more useful it is combined with Multicast DNS, in which the device itself holds its own name. Thus it is not even necessary to determine what IP address the device assigned to itself, because its name can always be used instead. An IP Multicast is a mechanism for sending a single message to multiple recipients. IP multicasting is especially useful for discovery operations where one does not know exactly who has the information one seeks. In such cases, one can send a request to a reserved IP multicast address. Any services that can provide the requested information will also subscribe to the multicast request and thus be able to hear the information request and properly respond. In addition, the above disclosures also satisfy the functionality that allows a DHCP client within the device to operate as if a DHCP server were available.

In response to the applicant arguments "receiving DHCP discover message within the client device or allocating an IP address to the client device in response to

receiving said DHCP discover message, within the client device." Gu discloses a computing device for dynamically self-configuring a computing device upon introduction on a network to interoperate (within the device) with other devices on the network where an addressing module operating to configure an address upon introduction of the computing device on the network; an announcing module operating to send a message announcing the address assigned to the computing device; a discovery module operating to listen or sense for a discovery message on the network, the discovery message having an identifier to identify an other computing device; a discovery response receiving module operating upon receipt of the discovery message to send a response message to the discovery message; and a description module operating upon receipt of a description request received by the computing device on the network for sending a description message defining a protocol for interaction via data messaging of the computing device with the other computing device, the other computing device configured to remotely operate the computing device. In addition, the above disclosures also satisfies the applicant arguments which is "the reception of such DHCP discover message within the originating client device or allocating an IP address of to the originating client device from within the device in response to the received message."

In response to applicant arguments regarding claim 2 "a packet driver." Gu discloses TCP/IP stack 958 (WinSock) and a network interface card (NIC) 960 that provides a physical connection to the computer network which does the same functionality as a packet driver does.

In response to applicant arguments regarding claims 5, 8-10 & 12, applicant argues in the same terminologies wherein “tiny DHCP unit, sending, monitoring, requesting including IP address and response back or ACK.” Gu/Okano discloses TCP/IP provides the ability to initiate a connection with a specified application running on a specific device provided both the network address of the device (IP address) and the application address (port) are known, a TCP socket using its IP address and an arbitrary (predefined) port number. This address/port pair will be referenced by all incoming URL requests. Gu discloses in Fig. 2, DHCP offer where DHCP or client device listens for incoming connection requests on that socket and sets itself up to accept any incoming connections. Also, the DHCP reply packets in response to the DHCP discover and in which IP addresses pooled by the DHCP client/server as well as responding with an ACK message.

### ***Conclusion***

Applicant's arguments filed on 12/17/2007 have been fully considered but they are not persuasive. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sulaiman Nooristany whose telephone number is (571) 270-1929. The examiner can normally be reached on M-F from 9 to 5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Pwu, can be reached on (571) 272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sulaiman Nooristany      01/18/2008



JEFFREY PWU  
SUPERVISORY PATENT EXAMINER